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10/823,750	04/14/2004	Yao-Chin Nieh	OP-093000133	5074

7590 10/28/2005  
Yi-Wen Tseng  
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EXAMINER
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MITCHELL, KATHERINE W

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/823,750

Applicant(s)

NIEH, YAO-CHIN

Examiner

Katherine W. Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:
  - Numerous grammatical errors were found, examples of which follow:
    - The top paragraph of page 2 is exemplary of the grammatical errors, likely due to translation, that are throughout the specification. Suggested corrections are in bold:

*Second, when the nut is being tightened, the screw body 10a is being forced to rotated in the opposite direction where the fitting cone 12a can not be seen from outside so that over tightening could cause the larger end of the cone 12a ~~is to be~~ completely pressed into the expansion unit 20a and the expansion anchor to be ~~being~~ pulled out of the wall.*
    - Pg 1, line 25 "need" and line 26 "apparent" are incorrect.
    - Pg 5, line 17 "tighten" and line 21 "anchor" are incorrect.
    - Page 5 - top paragraph-- "in round arc being used to secure variety of pipes (for example, water/gas pipe) and the screw part 52 can be used to connect to the thread part 11 of the screw body 10 so that the hook 51 embraces around the pipe. The header 12 of screw body 10 can be twisted by a tool or hands directly so that the hook 50 is moved toward the wall 40 securing the pipe." has "hook 51" and "hook 50". Applicant has disclosed "standard securing hook 50, which has a hook part 51", but later references to simply "hook" are unclear.

Applicant should review and correct minor tense/translation/usage/spelling errors.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The means of connecting parts 10 and 20, the screw body to the expanding unit, which is critical or essential to the practice of the invention, is not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Fig 4 -6 show the connection as a rivet, but examiner does not see any description of how that occurs, or can occur, especially looking at the separated view of Fig 2 prior to insertion. How does the end of "131" get expanded to form the rivet joint? Further, Fig 7 shows the connection as connected via a screw 26, but the description of use seems to require the screw body 10 to be rotatable so it can move in or out with respect to the wall surface, thus it appears to examiner that this rotation would loosen any connection between parts 10 and 20.

Referring to page 5 of the specification:

"...so that the hook 51 embraces around the pipe. The header 12 of screw body 10 can be twisted by a tool or hands directly so that the hook 50 is moved toward the wall 40 securing the pipe.

*Please refer to Fig. 7. The connecting part 13 of screw body 10 consists of a larger hole 132 and a smaller hole 133. At front end of the expansion unit 20 is*

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*a raised rod (or convex) 25 with a threaded hole 26, where the raised rod 26 can fit right into the larger hole 132 of screw body 10 and the threaded hole 26 matches the smaller hole 133 of screw body 10. A screw connects the screw body 10 tightly to the expansion unit 20 through the threaded hole 26, but the screw body 10 can be rotated around expansion unit 20...."*

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, claim 1, lines 4-5 recite "a number of the cambered surfaces equals to a number of the gutters." While applicant is trying to avoid problems with antecedent basis, the wording allows a person to select any number of the gutters (if there are 4 gutters, one could select 1,2, 3, or 4 gutters) and to select any number of the cambered surfaces.

Also regarding claim 1, the phrase "ring- like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "ring-like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). Further, what exactly is considered like a ring - must it be round, annular, or what property makes something "ring-like"? Similarly, the phrase "plug shaped in cone" is unclear. What is the shape of a plug? What is "in cone"? Does applicant mean --tapered plug--?

Claims 2-10 are rejected as depending from rejected claim 1.

***Claim Rejections - 35 USC § 102***

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hite et al. USP 6282999.

As best understood by examiner, Hite teaches an expansion anchor comprising a “ring-like” sleeve (16) with a plurality of axial gutters and cambered surfaces (46) between gutters (44), a circular cylinder screw body (14) including an internally threaded part, header, and connecting part which connects to expansion unit at second end (Fig 2 - unit 10), and a tapered plug that fits into first end of expansion unit (Fig 1 and 2). The head is shown as hexagonal. The connecting part of the screw body is broadly considered a round rod (32), and “39” is considered the hole (annular hole) in the expansion unit. The plug is shown as a round cone.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. USP 6282999.

As best understood by examiner, Hite teaches all the elements except a square

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head and multiple grooves on the expansion unit. Examiner takes Official Notice that a square is a known shape for a head (it allows gripping for rotation), and that multiple grooves are well known to enhance gripping. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Hite and common knowledge in the art before him at the time the invention was made, to modify Hite to include a square head and multiple grooves on the expanding section in order to obtain (1- a head to correspond to known sockets for rotating fastener heads and (2) - grooves to enhance gripping by increasing friction. One would have been motivated to make such a combination because such features are commonly known in the fastener art.

***Allowable Subject Matter***

9. Examiner is withholding an opinion on allowability of all claims until the indefinite and contradictory wording is corrected and the enablement is addressed. However, it **appears** to examiner that an independent claim similar to that below would read over the prior art if the 112 rejections are overcome:

--1. An expansion anchor, comprising:

an expansion unit shaped as an annular sleeve, including a plurality of gutters being spaced along an axis direction at first end which includes a cambered surface between two adjacent gutters, wherein the total number of cambered surfaces equals to the total number of gutters;

a screw body including an internally threaded part, a head, and a connecting part which rotatably connects to the expansion unit at a second end and allows the screw

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part to rotate with respect to the expansion part when the expansion anchor is inserted and expanded; and

a frustoconical plug, such that a tapered end of the plug fits into the first end of the expansion unit.--

**Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell  
Primary Examiner  
Art Unit 3677

